DOCUMENT RESUME

ED 296 442 EA 020 058

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TITLE The Educative Function of Teaching: An Emerging Paradigm for the Evaluation of Teaching.
PUB DATE Apr 86
NOTE 22p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, April 16-20, 1988).
PUB TYPE Reports - Evaluative/Feasibility (142) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Efficiency; Elementary Secondary Education; *Measurement Techniques; *School Effectiveness; *Teacher Effectiveness; *Teacher Evaluation

ABSTRACT

Perhaps the most crucial education question of the late 1980s involves the assessment and evaluation of teaching quality. To help identify quality of teaching issues, this paper poses three questions: (1) Why have teachers found research-based teaching quality indicators so hollow and unacceptable? (2) What role, if any, can the accumulated results of two decades of teacher effectiveness research play in quality-of-teaching evaluation? and (3) What will be the character of the evaluation trend which will emerge to champion the cause of teaching quality? A major difficulty arises from the misuse of two common terms: efficiency (achieving one's goal with the least resource expenditure) and effectiveness (the degree to which an organization realizes its goals). Several local evaluation instruments appear to measure efficiency rather than effectiveness. Instruments seldom accommodate context, teaching complexity, and the dynamics of teaching and learning. Teacher effectiveness research has succeeded in enlarging a rather sparse definition of teaching. A fuller understanding emerges when teaching is viewed as possessing both structural and functional aspects. Process-product research, however, is concerned only with the structure of teaching (involving classroom management and behavior control aspects). While teachers' mastery of structural competencies is essential, true quality-of-teaching assessment must measure the educational function of teaching and account for the quality of teacher-pupil interactions within a structurally devised environment. This type of assessment involves four principles: linkage of school purpose and teacher decisions, teaching as situation specific, quality teaching as educative, and quality teaching as a reconstructive experience. Included are 17 references. (MLH)

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The Educative Function of Teaching:

An Emerging Paradigm for the Evaluation of Teaching

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Paper presented at the Annual Meeting of the American Educational Research Association Meeting, April 1986, San Francisco, CA

EA 020 058

Perhaps the most crucial education question of the last half of the 1980s is, "How will the quality of teaching be assessed and evaluated?" What shall constitute the structure of pedagogical quality is clearly a key issue in the current efforts to develop a plan for merit pay, advancement on a career ladder, or promotion. The results of a 1984 Gallup Poll suggested that the lack of a workable definition of quality in teaching is a major concern among teachers. Of those teachers surveyed, 55 percent opposed merit pay on the grounds that quality in teaching could not be assessed accurately. At a grassroots level, an important transitional phase is developing regarding the description and evaluation of quality in teaching.

In an attempt to grapple with the issues of identifying quality teaching, we pose three questions. First, why have the findings of teacher effectiveness research as indicators of quality in teaching become hollow and unacceptable to many teachers? Second, what role, if any, can the accumulated results of two decades of research into effective teaching play in the evaluation of the quality of teaching? And, finally, what may be the character of the evaluation trend which will emerge to champion the cause of quality in teaching? Each of these inquiries must be addressed and resolved if quality teaching is to become more than a political symbol.

Teaching Effectiveness and Teaching Quality

One of the principal obstacles of application of teacher effectiveness findings to the assessment of teaching arises from the misuse of two common terms--efficiency and effectiveness. Efficiency is commonly understood as a characteristic that has been attained when one has achieved one's objective or goal with the lowest possible expenditure of resources; efficiency is achieved by reducing the amount of resources required to produce a unit of output. Effectiveness is commonly understood as the degree to which an organization realizes its goals. The authors examined several local evaluation instruments, which purported to measure "teacher effectiveness," and found them to be measures more of efficiency than of effectiveness. By definition, a methodology to determine "effectiveness" requires a statement of organizational goals. A determination of "teacher effectiveness" denotes a direct comparison of teacher performance with the specified goals of schooling. None of the instruments mentioned local educational goals and none attempted to measure the degree to which local educational goals were being met. The primary use of these instruments was to estimate the costs of instructional time and to record how teachers used that time. In an economic sense, administrators use teacher evaluation data for the purpose of monitoring the distribution of company financial resources, which includes time, and do not use the data to determine

teacher effectiveness, that is, to identify the contributions that a teacher makes in helping the organization achieve its goals or to connect the activities of teaching with the organization's goals.

Another reason the findings of research into teacher effectiveness have not been widely accepted by teachers is that the evaluation instruments widely used ignore the context in which teaching occurs. The classroom environment is dynamic, learning is dynamic, students are dynamic. The evaluation instruments we examined treated learning and teaching as static--as outcome rather than process oriented. The instruments, furthermore, were not sensitive to variations among differing educational contexts. Moreover, school districts used but one instrument to measure all types of teaching in all contexts of teaching. This restricted view violates a commonly held belief among teachers that different teachers teach differently to different students in different classes.

The presence of movement and motion within the teaching event is another critical feature that limits the applicability of the process-product design to evaluation of quality in teaching. Evaluation instruments derived from findings of teacher effectiveness fail to accommodate the dynamic aspects of teaching and learning. Whitehead's (1938) description of the displacement of Newtonian physics by Einstein's theory of relativity serves as one of the best illustrations of this phenomenon. Newton's paradigm adequately described how the physical world

functioned until those principles and laws were applied to space, to the universe at large. In the realm of outer space, Newton's calculations were found to be inaccurate primarily because his system did not account for the motion and movement of astral bodies. Newtonian mechanics described the location of celestial bodies as if they were fixed in place at a point in time. Because the theory of relativity accounted for motion and movement, Einstein's description came to be accepted as a more precise portrayal of reality.

A similar phenomenon may be seen to occur in the isolation of variables, a procedure inherent in experimentation. By isolating variables for study, researchers fix those variables in time and space thereby excluding motion and movement from investigation. The complex motions and movements present during the interplay of teaching-learning variables occur outside the paradigm and are accounted for, if at all, under an ambiguous category of complexity. A more fundamental reason to explain the inadequacy of the process-product design to account for quality in teaching can yet be identified.

Understanding teaching as holistic, as something akin to a biological context as suggested recently by Eisner (1978) and long ago by Taba (1932), requires an admission of the inability of process-product research to describe quality. Teaching, when conceived as an organic process, as a complete episode, cannot have its basic parts severed for study without

inflicting pathological damage to understanding its very nature. Isolating the variables of teaching necessarily disrupts the interrelationships and flow of events that together define teaching. Such a condition may be the grounds for Stodolsky's (1984) observation that the key limitation of results obtained from the prevailing process-product design of evaluation was "the lack of generalizability" and may help explain why teachers find the flexible rules of probability that have been generated by process-product research difficult to accept as accurate, much less adequate, descriptions of quality in teaching.

The major restriction which curtails the acceptance of teacher effectiveness findings as evidence of quality in teaching is that the findings ignore the complexity of teaching. Pervasive use of process-product research has been unable to accommodate the complications inherent in the teaching event. Gage (1984) characterized the research difficulty as a "tremendous complexity--resulting from a large number of relevant variables and the interaction among those variables." by isolating variables for study, teacher effectiveness researchers found a multitude of factors which exercise a considerable, but not a consistent, influence over the teaching event. Scriven's (1980) observation elaborates on Gage's analysis and suggests that the limitations of a process-product design for describing the complications of the teaching event is both serious and recurring. ". . . all the purely non-evaluative properties are

sometimes imbued by the environment with value." This revelation has subtle but powerful implications for the capability of the process-product model to be adjusted to deal with high level complexities found in teaching. While teacher effectiveness researchers acknowledge the limitations of their findings, others have overgeneralized those same findings. Given the appropriate environmental conditions, any and every aspect of teaching has the potential for exercising control over the entire teaching event. Caveats postscribed to teacher effectiveness research findings may continue to weaken the credibility of findings with many teachers.

Teacher Effectiveness: Contributions to Evaluating Teaching

While the inability to accommodate complexity has limited the descriptive power of the process-product design, teacher effectiveness findings have made a considerable contribution to the current popular perspective of teaching. Perhaps the most significant endowment of 20 years of teacher effectiveness study has been the enlargement and filling out a rather sparse description of what is encompassed by teaching. The criteria for the assessment of good teaching has progressed far from Rugg's (1950) characterization of a good teacher as a person "who loves to teach and who loves children" to a host of empirically derived descriptors of teaching activities.

Over the last two decades, not only has there arisen a need for a richer description of teaching, the profession has demanded descriptions in more practical, concrete terms as well. An example is Cremin's (1964) observation concerning the work of John Dewey, the most influential American educational figure of this century. "Dewey's writings, however brilliant, are long and involved, and frequently ambiguous . . . some shorter summing up, some statement of key ideas was needed" (p. 271). Teacher effectiveness studies fulfilled such a need. Findings have been reported in down-to-earth, hands-on language that enabled teachers to conceptualize the elements of their craft and articulate the tools of their profession in concrete terms for the first time in history.

The Structure and Function of Teaching

The worth of teacher effectiveness findings may be explained more clearly if teaching is conceptualized as having both structural and functional aspects. Structure describes the basic conditions necessary for teaching to occur. Function is described in terms used by Taba (1932) as she noted that education, being interactive, occurs between the individual and the environment. Learning and growth are located neither solely within the learner nor solely within the environment, but in the interaction between them. The teacher serves as the mediator of that interaction.

Structure and function relate to quality in teaching in the same way that a chessboard and pieces relate to the caliber of the game played. The apparatus of structure, i.e., board and pieces, is indispensable to the playing of the game. But, the quality of the match is dependent upon the functional capabilities of the players to adapt to the motion and movement of the contextual environment created and unfolding on the board.

Teacher Effectiveness Defines Structure

The findings of process-product research may be viewed as concerned only with the structure of teaching, and quite probably, with limited aspects of that structure. Identification of the structure in which the intent to teach is most successful--a classroom management system in place, behavioral control mechanisms organized, teacher expectations operative, attention given to time-on-task, and many other factors--has been the unique contribution of teacher effectiveness research. A teacher's facility in establishing and maintaining a teaching structure may be compared with a journeyman perfecting the skills fundamental to becoming an craftsman. With the mastery of the fundamental techniques, craftsmanship becomes a potential. While the difference between a journeyman and a craftsman is more than the acquisition of essential skills, without acquisition of structural competencies of the trade, expertise is not possible. Quality in teaching too may be seen as arising out of an

indispensable structural foundation. With mastery of the fundamental structural techniques, quality teaching becomes a true potentiality.

Articulation of the basic structural competencies of teaching is the achievement of two decades of teacher effectiveness research. Unquestionably, those pedagogical skills identified by teacher effectiveness studies will remain a part of the required learning of each new generation of teachers. In a new era of description and evaluation of quality in teaching, the structural aspects of the teaching event--teacher effectiveness findings--will no longer be looked upon as the journey's end, but as the bon voyage. The new departure seems destined to follow the route of functional aspects of teaching.

Evaluation of Quality in Teaching at the Functional Level

The assessment of quality in teaching, if it is to measure the educative function of teaching, must account for the quality of the interactions between pupil and teacher as they cooperatively investigate their environment. In the assessment of quality in teaching, the complexity of the teaching event is assimilated into the model by a process Guba (1981) termed "invited interference," i.e., the movement and motion of the teaching event is not, for it cannot be, expected to follow a perfectly

predictable path. At the functional level, quality in teaching is not found in the replication of hypothetical behaviors, but rather in the mindful decision and reactions of the teacher to both the unexpected as well as the routine. Important to note is that while teacher responses during the action of the classroom may be intuitive, those decisions are rated as to the quality of their rationality and purposiveness. Within the functional level, four main principles are suggested for the evaluation of the educative qualities of teaching.

Linkage of Purpose

Critical to quality in teaching are teacher decisions made from a firm and defensible basis in purpose. Two recent studies of American schools cite the absence of a definitive purpose for schooling as the most serious deficiency of the nation's educational systems. Boyer (1983) asserted categorically that "schools are adrift" due to a glaring lack of purpose. Goodlad (1984) remarked that his extensive study of schools of the 1980s revealed that "it may be necessary to recognize that the school will continue to be a viable, appreciated institution only if we define its mission more precisely" (p. 59). A unifying of school purpose suggests a visible, explicit linkage between teacher decisions, their purposes of their lessons, purposes served by particular courses or disciplines, and a direct connection among these three levels of purpose and the purposes for which the school exists in a community.

Purpose may be viewed as the single most powerful source of validation for the United States public school teacher. As Stodolsky (1984) noted, "The integrity and coherence of teaching can be seen by accepting its purposive qualities." For too long, the emphasis has been on what teachers do rather than on why they do what they do. If quality in teaching is destined to be realistically described and evaluated, the relationship between teacher decisions and a guiding purpose must be articulated. Teaching activities "can only be characterized . . . by looking at their point or purpose" (p. 104). Quality in teaching partially resides in a practitioner's capability to articulate and to verify the purposive decisions leading to action or non-action during the teaching event.

Teaching is Situation Specific

Teaching episodes occur within a context. In order to understand a particular act of teaching, one must understand the context within which it takes place. This principle is in part related to the importance of understanding purpose, as actions become meaningful within a context. The evaluation of the quality of classroom interactions can be seen as directly related to pedagogical decisions made by a teacher within the movement of the teaching event. Some alteration in every preconceived teaching plan seems inevitable. Dewey (1916) recognized that "the intentions of teachers were more often the unexpected rather than the expected" (p. 76-77). While

a change in the intent of the lesson may be intuitive on the part of the teacher, those decisions may not be categorized as whimsical if the essence of quality is to be maintained. In the assessment of quality teaching, the flexibility exercised by the teacher in altering the course of classroom interaction must be shown to remain anchored in the solid foundation of existing connected purposes or to lead to the act of connecting new purposes.

Quality Teaching is Educative

A distinctive feature of quality in teaching is the intention and the efforts of the teacher to expand and deepen the meaning of the lesson for all pupils. From an evaluation standpoint, the evidence of this endeavor is more closely related to the purposes and actions of the teacher than with the opportunities provided by the teacher to extend the meaning of the object of investigation. Two evaluation guidelines may provide direction in monitoring this principle.

First, the expansion and deepening of meaning explicitly and vastly exceeds the level of competence expressed by behavioral or instructional objectives. Mastery of objectives may be viewed as a prerequisite to an increase in meaning, a basic structure upon which a larger meaning may be erected. To reiterate, an enlargement of meaning through teaching goes far beyond such outcomes as the pupil's getting the point, grasping the idea,

or arriving at a solution. Through quality teaching, pupils make meaning for themselves. What becomes meaningful is used. Meaning, in the evaluation of quality in teaching, is defined as more than an absence of ignorance.

Second, the inculcation of meaning by pupils may not be observable, but may assume a latent form. Komisar (1966), for example, noted that at the levels of intellectual interaction in the teaching event, goals are not accomplished "by some kind of learning (applied skill), but (by) some form of awareness--which is the intended upshot of intellectual teaching activity" (p. 73). Closely associated with this view of awareness is the educative syndrome termed "initiation" by Peters (1973). "Education consists of initiating others into activities, modes of conduct and thought. . .in which it is possible to act, think, feel with various degrees of skill, relevance and tasks." Neither awareness nor initiation are acquired skills demonstrable on demand. Each is a precursor to the broader perspective and the conceptual connections associated with the process of making meaning.

Both awareness and initiation are potential routes to what Broudy (1980) described as the two major justifications for schooling. One is termed "associative:" objects of classroom investigations are associated with concepts, images, and relations encountered in life. The second Broudy termed "interpretive:" objects of classroom investigations are

translated from one set of concepts to another, from one context to another, from one realm of meaning to another. Broudy's contention is that the inability to recall facts from classroom recitation does not deter the formation of an educative residue of broader and deeper meaning acquired from awareness and initiation. This notion coincides with Peter's (1973) view that "To be educated is not to arrive at a destination; it is to travel with a different view." In the assessment of quality teaching, there must be evidence that the teacher made a bona fide attempt to provide an opportunity for pupils to acquire that different view.

Important to the evaluation of the educative aspect of quality teaching are the opportunities provided by teachers for educative expansion of pupils. Concrete evidence of the positive results of educative opportunity is rare. In a business sense, the event might be viewed as "risk money," or in a philosophical vein as "bread cast on the water." In the assessment of quality in teaching such educative efforts by the teacher are absolutely essential. Without a routine plan to broaden and deepen the meanings in instruction by teachers, schooling may claim to be only a mere training ground where the acquisition of an education is a random, capricious event.

Quality teaching as a reconstructed experience.

The most crucial aspect of the assessment of quality in teaching resides in the reconstruction phase of evaluation. Dewey (1916) observed that activity - the motion and movement of the teaching event - was blind, and that education "is a constant reorganizing and reconstructing of experience." To follow that line of reasoning in determining teaching quality, the decisions made by a teacher during the rapid interaction of the teaching event may be seen as drawn from an already existing reservoir of training and experience. Decisions are directly related to the education of the teacher at a particular moment in time.

Continued training and experience may increase the quality of decisions for most teachers. A guided and cooperative reorganization of the teaching event, however, offers the probability of expanding, deepening, and hastening the education of the teacher, i.e., improving the analysis of the teaching event, increasing the variety of alternatives available to the teacher for use during subsequent classroom interactions, and developing a rational essence from which intuitive decisions are made within the motion and movement of the teaching event. The primary purpose of the reconstruction phase of evaluation for quality may be summarized as enlarging the teacher's reservoir of viable alternatives leading through the training function of teaching toward the ultimate purpose as educative. The goal of the act of reconstruction is two-fold. One is to

enhance the professional growth of teachers, and the second is to provide a legitimate means of distinguishing the true craftsman from the journeyman practitioner in a field that has been driven historically by externally imposed criteria rather than purposeful professional choices.

Quality Teaching: Assessment With A Different View

The observation of structural teaching elements in classrooms may provide sufficient evidence to distinguish between the blatantly inept and the competent teacher. If quality in teaching is to become the goal of pedagogical assessment, however, the direction of inquiry must be drastically altered. No longer is the issue one of separating poor teaching from good teaching. Merit pay and career ladders clearly suggest that assessment is aimed at distinguishing better teaching from good teaching. More importantly, a major role of assessment is to describe the criteria which are indicators of growth along a continuum of good teaching to better teaching to the best that one can become as a teacher. Confined to the more rigid structure of teaching, current assessment practice cannot provide such precise distinctions. Only if the teacher's role in the teaching event is viewed from a new perspective can quality begin to be revealed.

Quality teaching may be more accurately assessed through the functional aspects of the teaching engagement rather than through its structural

dimensions. The evaluation of function avoids the inflexible process-product orientation of the structural elements. The goal of structure is to identify a definable product extracted from a set of teacher behaviors. Function, on the other hand, may be viewed as a process-process methodology. Processes employed by teachers in a functional capacity are aimed at triggering subsequent sets of processes among pupils in the classroom, and are not primarily concerned with specific pupil behaviors. Whatever product (behavior) ultimately results is of secondary importance to the nature of pupil interaction and engagement with the objects (contents) of study.

To assess teaching from a functional platform, the observer-evaluator is required to perceive classroom action from a different perspective from that of a structural sighting. That altered vision approximates the assertion made by Davis (1982) that in the pursuit of quality in teaching "the destination is less important than the direction." What teachers do becomes subservient to the why of teacher activity. Physical acts suddenly become transparent and the quality in teaching becomes visible as an intellectual endeavor. Framed by the stated and inferred purposes of the teacher, quality teaching is unveiled in the degree of analysis, judgment, critical thinking, and problem solving applied by the teacher through thoughtful, logical, flexible, and humane decisions arising out of a sound and solid understanding of the events in progress. In the final analysis,

the question is not whether the stated objective was attained, but whether a vigorous attempt was made to meet the needs of pupils in their engagement with knowledge (subject matter).

Three criteria appear to be essential in the assessment of quality in teaching. First, how well does the teacher coordinate the intended purpose of the teaching event with the conditions operating in the classroom? Are teacher decisions defensible? And, second, is the teacher aware of the motion and movement among purposes, operating conditions, and decisions in the teaching sequence? At the conclusion of the observed episode, can the teacher articulate "what was" and make an estimate of "what might have been?" And, finally, while a grossly poor decision may prove to be critical to assessment, imperfect teacher decisions seldom carry an abundance of weight in the valuation of quality teaching. A commitment to professional growth and not to perfection is the trade mark of quality in teaching. Becoming a teacher of quality is not a destination, but it is to travel with a different view.

References

Boyer, E. L. (1983). High School. New York: Harper & Row.

Broudy, H. L. (1980). Tacit knowing as a rational for liberal education. In D. Sloan (Ed.) Education and Values (pp. 50-66) New York: Teachers College Press.

Cremin, L. A. (1964). The Transformation of the Schools. New York: Vintage Books.

Davis, O. L. (1982). Pointing the right direction: Toward the invention of our futures. Speech delivered to the Thirty Third Biennial Convocation of Kappa Delta Pi, 3 April 1982.

Dewey, J. (1916). Democracy and Education. New York: Free Press.

Eisner, E. (1978). The impoverished mind. Educational Leadership, 35(8), 615-623.

Gage, N. L. (1984). What do we know about teaching effectiveness? Phi Delta Kappan, 66(2), 87-93.

Goodlad, J. I. (1984) A Place Called School. New York: McGraw- Hill.

Guba, E. G. (1981). Effective Evaluation. San Francisco, CA: Jossey-Bass.

Hirst, P. H. (1974). Knowledge and the Curriculum. Boston: Routledge & Kegan Paul.

Komisar, B. P. (1968). Teaching: act an enterprise. In C.J.B. Macmillan and T. W. Nelson (Eds.) The Concept of Teaching. Chicago: Rand McNally & Co. pp. 63-88.

Peters, R. S. (1973). Authority, Responsibility, and Education. New York: Paul S. Eriksson. pp. 65-107.

Phi Delta Kappan (1984). The Gallup Poll of teacher's attitudes toward the public schools. Phi Delta Kappan, 66(2), 97-108.

Rugg, H. & Brooks, B. M. (1950). The Teacher in School and Society. New York: World Book Co.

Scriven, M. (1980). The Logic of Evaluation. Inverness, CA: Edgepress.

Stodolsky, S. S. (1984). Teacher evaluation: the limits of looking. Educational Researcher, 12(3), 6-15.

Taba, H. (1932). The Dynamics of Education. New York: Harcourt Brace Co.

Whitehead, A. F. (1983). Modes of Thought. New York: Macmillan.